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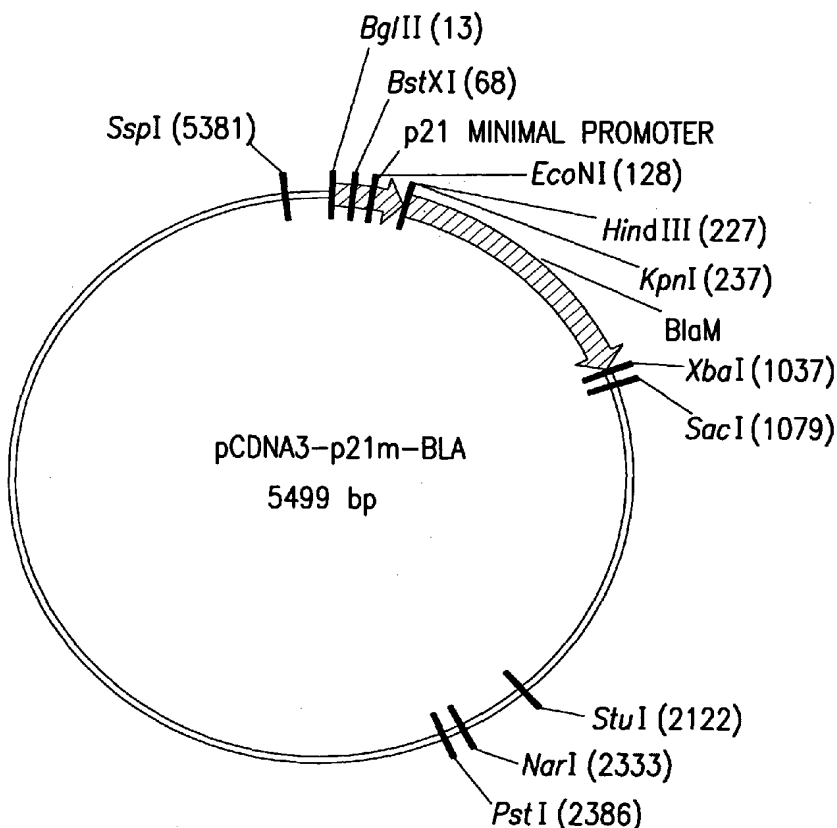
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[Continued on next page]

(54) Title: METHOD FOR IDENTIFYING HISTONE DEACETYLASE INHIBITORS



(57) Abstract: A method for identifying analytes which are histone deacetylase (HDAC) inhibitors is described. The method provides cells comprising a reporter gene operably linked to a transcription regulatory sequence, which includes nucleotide sequences responsive to a known HDAC inhibitor or subtype, stably integrated into the genome of the cells. A culture of the cells is incubated in medium which contains an analyte and the culture monitored for expression of the reporter gene. Analytes which have HDAC inhibitor activity induce expression of the reporter gene. In particular embodiments, the transcription regulatory region is a sequence of the p21WAF1/CIP1 transcription regulatory sequence which is responsive to a known HDAC inhibitor but not responsive to p53.

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